Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A method of adapting a pilot filter that processes received signals in a wireless communication network, the method comprising:

determining a velocity of a wireless communication device in relation to a wireless network infrastructure;

estimating a noise power estimate of at least one of the received signals; and

determining one or more coefficients of the pilot filter based on the determined velocity of the wireless communication device and the noise power estimate,

wherein:

the pilot filter receives a plurality of pilot symbols; and

each symbol of the plurality is multiplied by the at least one of the one or more coefficients.

2. (Original) A method as defined in Claim 1, wherein determining the velocity of the wireless communication device and determining the one or more coefficients are performed in the wireless communication device.

3-5. (Cancelled).

6. (Original) A method as defined in Claim 1, further comprising applying the one or more coefficients to a pilot filter.

7-8. (Cancelled).

9. (Original) A method as defined in Claim 1, wherein determining the velocity further comprises receiving velocity information from a global positioning system receiver.

10. (Original) A method as defined in Claim 1, wherein determining the velocity further comprises receiving at least two location measurements of the wireless communication device, wherein the measurements are made at different, known, times, and determining the velocity of the wireless communication device is based on the at least two location measurements and their respective measurement times.

11-14. (Cancelled).

15. (Previously Presented) A method as defined in Claim 1, wherein determining the one or more coefficients further includes selecting the one or more coefficients from a set of predetermined coefficients.

16. (Currently Amended) A communication device comprising:

a pilot filter that receives pilot signal samples over a communication channel; and

a controller that determines filter coefficients of the pilot filter based on the wireless communication device velocity and an estimate of noise power in the communication channel, and adapts the pilot filter to the communication channel,

wherein:

the pilot filter receives a plurality of pilot symbols; and

each symbol of the plurality is multiplied by the at least one of the one or more coefficients.

17. (Canceled).

18. (Original) A communication deice as defined in claim 16, further comprising a set of predetermined coefficients.

19. (Original) A communication device as defined in Claim 18, wherein the predetermined coefficients are retrieved from a look up table.

20. (Original) A communication device as defined in Claim 16, wherein the velocity of the communication device is determined in accordance with information from a global positioning system receiver.

21. (Original) A communication device as defined in Claim 16, wherein the velocity of the communication device is determined in accordance with at least two location measurements of the communication device, wherein the measurements are made at different, known times, and the velocity of the communication device is based on the at least two location measurements and their respective measurement times.

22-23. (Cancelled).

24. (Currently Amended) A communication device comprising:

a plurality of pilot filters each of which is configured to receive a pilot signal and to output a filtered pilot signal, wherein the plurality of filters are configured to be adapted by changing filter coefficients; and

a controller configured to select one of the plurality of pilot filter outputs based on the wireless communication device velocity and one of the plurality of pilot filters based on an estimate of noise power,

wherein the controller determines filter coefficients for the plurality of pilot filters based on the communication device velocity.

25-27. (Canceled).

28. (Currently Amended) A communication device as defined in Claim 27 24, wherein the filter coefficients are selected from a set of predetermined filter coefficients.

29. (Original) A communication device as defined in Claim 28, wherein the predetermined coefficients are retrieved from a look up table.

30. (Previously presented) A communication device as defined in Claim 24, wherein the velocity of the communication device is determined based on information from a global positioning system receiver.

31-34. (Cancelled).

35. (Currently Amended) A wireless communication system comprising:

at least one mobile wireless communication device with a pilot filter that is configured to accept coefficients that adapt the operation of the filter to a communication channel response; and

an infrastructure device configured to communicate with the at least one mobile wireless communication device, wherein the infrastructure device receives signals from the mobile wireless communication device and based on those signals determines pilot filter coefficients and transmits the coefficients to the mobile wireless communication device for use in configuring the pilot filter,

wherein the signals received from the mobile wireless communication device include an estimate of a noise power level in the communication channel.

36. (Original) A wireless communication system as defined in Claim 35, wherein the infrastructure includes a base station.

37. (Canceled).

38. (Original) A wireless communication system as defined in Claim 35, wherein the signals received from the mobile wireless communication device include an estimate of the mobile wireless communication device velocity.

39-49. (Cancelled).

50. (Previously Presented) A method as defined in Claim 1, wherein the one or more coefficients vary with an increase in the determined velocity, and the one or more coefficients vary with a decrease in the determined velocity.

51. (Canceled).

52. (Previously Presented) A method as defined in Claim 1, wherein the coefficients are selected to adapt the pilot filter to a communication channel having an optimal performance.

53. (Previously Presented) A method as defined in Claim 1, further comprising:
adapting the pilot filter to a communication channel having an optimal performance.

54. (Canceled).

55. (New) An apparatus of adapting a pilot filter that processes received signals in a wireless communication network, comprising:
means for determining a velocity of a wireless communication device in relation to a wireless network infrastructure;
means for estimating a noise power estimate of at least one of the received signals; and
means for determining one or more coefficients of the pilot filter based on the determined velocity of the wireless communication device and the noise power estimate,
wherein:
the pilot filter receives a plurality of pilot symbols; and
each symbol of the plurality is multiplied by the at least one of the one or more coefficients.

56. (New) An apparatus as defined in Claim 55, wherein the means for determining the velocity of the wireless communication device and the means for determining the one or more coefficients are in the wireless communication device.

57. (New) An apparatus as defined in Claim 55, further comprising means for applying the one or more coefficients to a pilot filter.

58. (New) An apparatus as defined in Claim 55, wherein the means for determining the velocity further comprises means for receiving velocity information from a global positioning system receiver.

59. (New) An apparatus as defined in Claim 55, wherein the means for determining the velocity further comprises means for receiving at least two location measurements of the wireless communication device, wherein the measurements are made at different, known, times, and determining the velocity of the wireless communication device is based on the at least two location measurements and their respective measurement times.

60. (New) An apparatus as defined in Claim 55, wherein the means for determining the one or more coefficients further includes means for selecting the one or more coefficients from a set of predetermined coefficients.

61. (New) An apparatus as defined in Claim 55, wherein the one or more coefficients vary with an increase in the determined velocity, and the one or more coefficients vary with a decrease in the determined velocity.

62. (New) An apparatus as defined in Claim 55, wherein the coefficients are selected to adapt the pilot filter to a communication channel having an optimal performance.

63. (New) An apparatus as defined in Claim 55, further comprising:

means for adapting the pilot filter to a communication channel having an optimal performance.

64. (New) A machine-readable medium comprising instructions for adapting a pilot filter that processes received signals in a wireless communication network, comprising:

determining a velocity of a wireless communication device in relation to a wireless network infrastructure;

estimating a noise power estimate of at least one of the received signals; and

determining one or more coefficients of the pilot filter based on the determined velocity of the wireless communication device and the noise power estimate,

wherein:

the pilot filter receives a plurality of pilot symbols; and

each symbol of the plurality is multiplied by the at least one of the one or more coefficients.

65. (New) A machine-readable medium as defined in Claim 64, further comprising applying the one or more coefficients to a pilot filter.

66. (New) A machine-readable medium as defined in Claim 64, wherein determining the velocity further comprises receiving velocity information from a global positioning system receiver.

67. (New) A machine-readable medium as defined in Claim 64, wherein determining the velocity further comprises receiving at least two location measurements of the wireless communication device, wherein the measurements are made at different, known, times, and determining the velocity of the wireless communication device is based on the at least two location measurements and their respective measurement times.

68. (New) A machine-readable medium as defined in Claim 64, wherein determining the one or more coefficients further includes selecting the one or more coefficients from a set of predetermined coefficients.

69. (New) A machine-readable medium as defined in Claim 64, wherein the one or more coefficients vary with an increase in the determined velocity, and the one or more coefficients vary with a decrease in the determined velocity.

70. (New) A machine-readable medium as defined in Claim 64, wherein the coefficients are selected to adapt the pilot filter to a communication channel having an optimal performance.

71. (New) A machine-readable medium as defined in Claim 64, further comprising:

adapting the pilot filter to a communication channel having an optimal performance.